

ABSTRACT

Systems and surgical techniques for presbyopia correction by laser removal of the sclera tissue are disclosed. The disclosed preferred embodiments of the system consists of a beam spot controller, a fiber delivery unit and a fiber tip. The basic laser including UV lasers and infrared lasers having wavelength ranges of (0.15-0.36) microns and (1.9-3.2) microns and diode lasers of about 0.98, 1.5 and 1.9 microns. Presbyopia is treated by a system which uses an ablative laser to ablate the sclera tissue outside the limbus to increase the accommodation of the ciliary body of the eye. The sclera tissue may be ablated by the laser with or without the conjunctiva layer open.